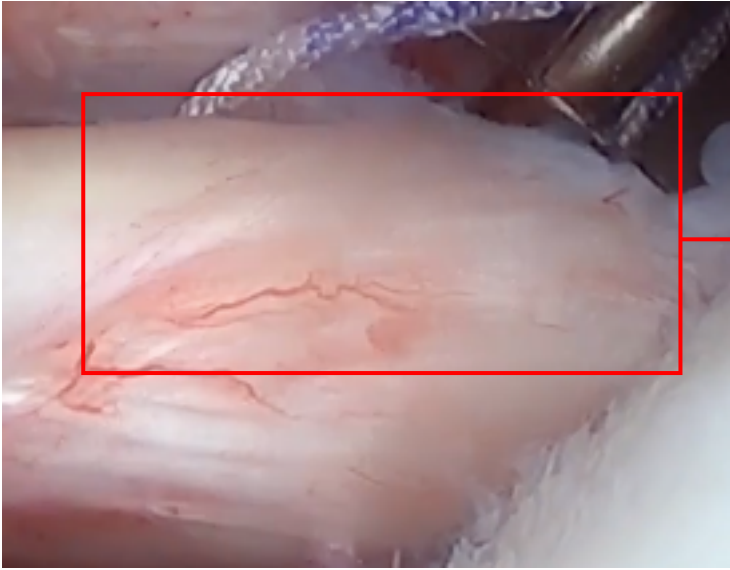


U.S. Patent No. US 8,617,160 v. Stryker

1. Claim Chart

Claim	Analysis
<p>[17.P] A device for the implantation into compromised osseous material comprising:</p>	<p>Stryker (“Company”) makes, uses, sells, and/or offers to sell a device for the implantation into compromised osseous material.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, Company provides REELX STT Knotless Anchor System, a medical device used for specific tissue tensioning during arthroscopic rotator cuff repair (“device for the implantation into compromised osseous material”). This self-punching knotless anchor features an internal locking mechanism designed to facilitate fine-tuning and tensioning of the repair.</p> <div data-bbox="426 751 583 781" data-label="Section-Header"> <p>REELX STT</p> </div> <div data-bbox="426 795 714 824" data-label="Text"> <p>Knotless anchor system</p> </div> <div data-bbox="426 839 1140 881" data-label="Text"> <p>Self-punching knotless anchor that features an internal locking mechanism designed to facilitate fine tuning and tensioning of the repair.</p> </div> <div data-bbox="1194 740 1923 1092" data-label="Image"> <p>The image shows a yellow Stryker REELX STT Knotless Anchor System device. It consists of a long, thin, silver-colored metal shaft with a yellow handle at the top. The handle has the Stryker logo on it. At the bottom of the shaft, there is a black, self-punching knotless anchor mechanism. The device is shown against a yellow background.</p> </div> <p>Source: https://www.stryker.com/us/en/sports-medicine/products/reelx-stt-reelx-knotless-peek-anchor.html</p>

	 <p>Compromised osseous material</p> <p>Source: https://www.stryker.com/us/en/sports-medicine/products/reelx-stt-reelx-knotless-peek-anchor.html, at 1:13 (annotated)</p>
<p>[17.1] an elongated tubular body wherein the elongated tubular body contains;</p> <p>a) a mobile elongated rod;</p> <p>b) an anchoring element attached to</p>	<p>Company provides a device, comprising: an elongated tubular body wherein the elongated tubular body contains; a) a mobile elongated rod; b) an anchoring element attached to the elongated tubular body c) a driver attached to the elongated rod.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the REELX STT Knotless anchor system comprises a rod-shaped body (“elongated tubular body”) that further comprises a mobile rod. Further, the body is inserted into the bone for inserting an anchor, which is attached to the tip of the device ("anchoring element attached to the elongated tubular body). Furthermore, the device includes a black knob which is rotated clockwise to spool excess suture into the anchor to facilitate insertion of the anchor inside the bone. Since, upon rotating the black knob, the anchor is pushed inside the bone, upon information and belief, there is a driver that is further attached to the mobile rod which rotates along with the black knob.</p>

the elongated tubular body;
and
c) a driver attached to the elongated rod wherein



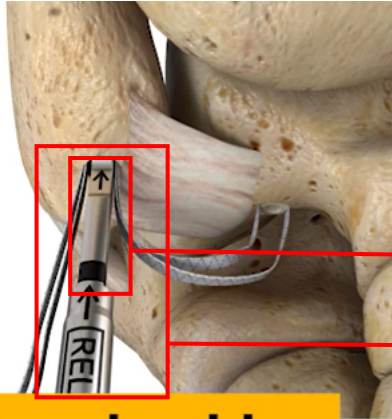
Anchoring element attached
to the elongated tubular body

Source:

<https://www.stryker.com/content/dam/stryker/sports-medicine/products/reelxsttknotlessanchorsystem/resources/ReelX%20STT%20Product%20Brochure.pdf>, Page 3

(annotated)

stryker

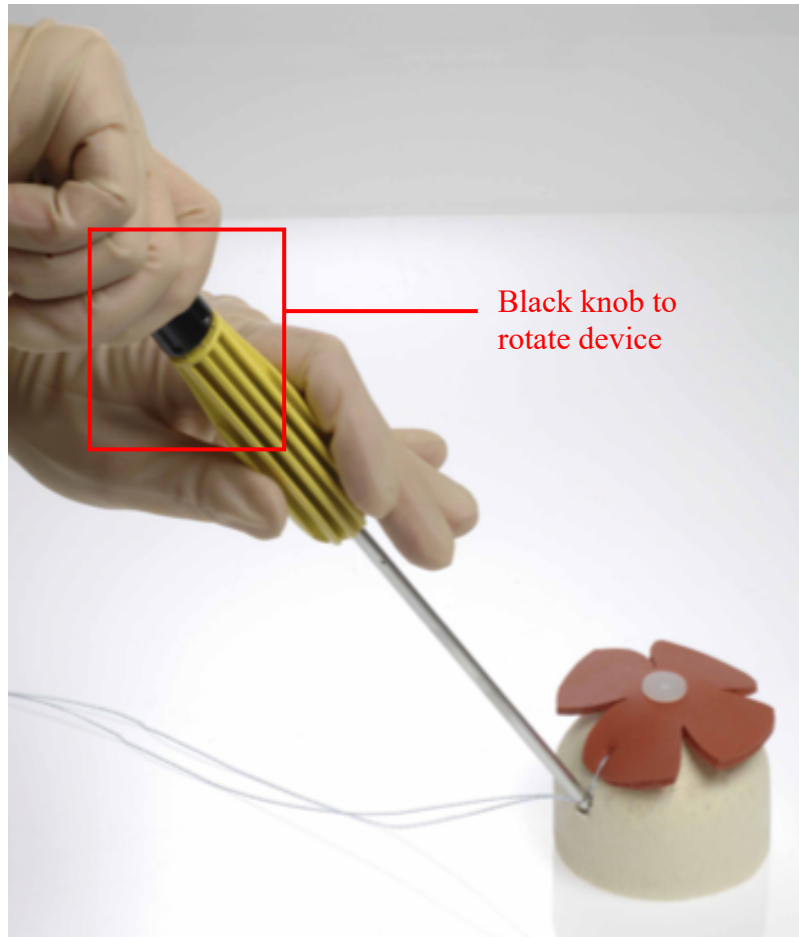


Mobile elongated rod

elongated tubular body

Foot and ankle

Source: <https://www.stryker.com/us/en/sports-medicine/products/omega.html> at 0:02 (annotated)



Source: <https://www.stryker.com/content/dam/stryker/sports-medicine/products/reelxstknotlessanchorsystem/resources/ReelX%20STT%20Product%20Brochure.pdf>, Page 3
(annotated)

[17.2] i) the driver moves within the elongated tubular body and engages the anchoring element causing the anchoring element to extend out of the elongated tubular body to engage the surrounding material; and

Company provides a device wherein i) the driver moves within the elongated tubular body and engages the anchoring element causing the anchoring element to extend out of the elongated tubular body to engage the surrounding material.

This element is infringed literally, or in the alternative, under the doctrine of equivalents.

For example, when the black knob is rotated clockwise, the desired suture tension is achieved, such that the anchor exits the tubular body ("the anchoring element to extend out of the elongated tubular body ") and expands into the bone ("engage the surrounding material"). Since the expansion of the anchor occurs with the rotation of the black knob, upon information and belief, the mobile rod and the driver, rotate inside the device to facilitate the insertion of the anchor.



Rotating black knob

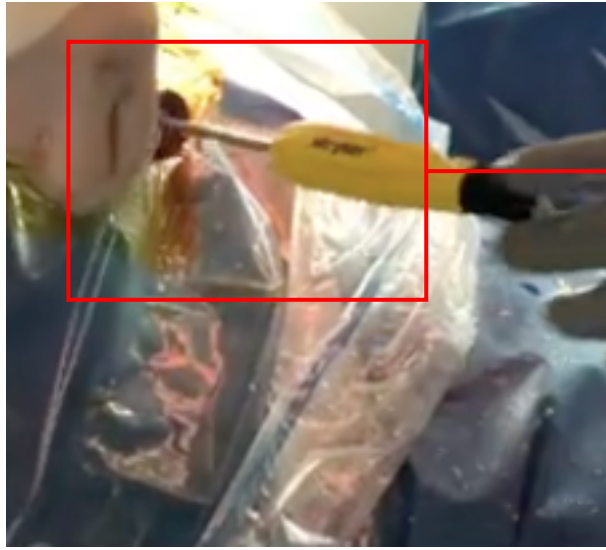
Source: <https://www.stryker.com/us/en/sports-medicine/products/reelx-stt-reelx-knotless-peek-anchor.html> at 3:30 (annotated)



On rotating black knob, the anchoring element expands to engage the surrounding material.

Source: <https://www.stryker.com/us/en/sports-medicine/products/reelx-stt-reelx-knotless-peek-anchor.html> at 3:38 (annotated)

	<p>While holding the yellow end of the inserter handle, rotate the black knob clockwise a minimum of one revolution to spool excess suture into the anchor. A maximum of three complete revolutions can be made. The implant has one locking point for every 60° of revolution of the black knob, and advances approximately 1.5mm of suture for every 60° of rotation. After achieving the desired suture tension, disengage the anchor inserter by pulling back on the yellow handle. Additional tension may be applied to the suture by re-engaging the inserter shaft into the implanted anchor and continuing to rotate the black knob clockwise.</p> <p>Source: https://www.stryker.com/content/dam/stryker/sports-medicine/products/reelxsttknotlessanchorsystem/resources/ReelX%20STT%20Product%20Brochure.pdf, Page 3</p>
[17.3] ii) the driver remains engaged with the anchoring element holding the anchoring element in position until the driver is moved a second time.	<p>Company provides a device wherein ii) the driver remains engaged with the anchoring element holding the anchoring element in position until the driver is moved a second time.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, after the anchor is inserted into the bone, the anchor inserter, including the driver, stays affixed with the anchor inside the body until the anchor is secured in place (“the driver remains engaged with the anchoring element holding the anchoring element in position”). Subsequently, the yellow handle of the anchor inserter device is pulled (“the driver is moved a second time”) to disengage the anchor inserter from the body, removing the device while leaving the anchor securely placed inside the bone.</p>



the driver
remains
engaged with
the anchoring
element

Source: <https://www.stryker.com/us/en/sports-medicine/products/reelx-stt-reelx-knotless-peek-anchor.html> at 2:46 (annotated)

While holding the yellow end of the inserter handle, rotate the black knob clockwise a minimum of one revolution to spool excess suture into the anchor. A maximum of three complete revolutions can be made. The implant has one locking point for every 60° of revolution of the black knob, and advances approximately 1.5mm of suture for every 60° of rotation. After achieving the desired suture tension, disengage the anchor inserter by pulling back on the yellow handle. Additional tension may be applied to the suture by re-engaging the inserter shaft into the implanted anchor and continuing to rotate the black knob clockwise.

	Source: https://www.stryker.com/content/dam/stryker/sports-medicine/products/reelxsttknotlessanchorsystem/resources/ReelX%20STT%20Product%20Brochure.pdf , Page 3
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2. List of References

1. <https://www.stryker.com/us/en/sports-medicine/products/reelx-stt-reelx-knotless-peek-anchor.html>, last accessed on 19 February 2024.
2. <https://www.stryker.com/content/dam/stryker/sports-medicine/products/reelxsttknotlessanchorsystem/resources/ReelX%20STT%20Product%20Brochure.pdf>, last accessed on 19 February 2024.